Amendments to the Specification:

Please replace the paragraph spanning lines 10-17 of page 1 as follows:

In general mobile communication systems, since a density of subscribers is different at every region and at every time, the tilt control is frequently required in order to optimize the ~~air interface network~~ mobile communication system. For optimization of the air interface network, in a conventional mobile communication system, a mechanical tilt is used. The beam tilt of the antenna in a vertical direction means an angle of the beam radiated by the antenna slopes to the horizontal.

Please replace the paragraph beginning on page 1, line 21 and ending on page 2, line 2 as follows:

Mechanical tilting of the antenna is a cost-effective way to manufacture the antenna. However, in this case personnel have to climb up toward the antenna to manually adjust antenna beam tilt. It is neither economically viable nor time-conscious. In other words, when the beam tilt of the antenna is required, the person should climb up toward the antenna, unfasten bolts fixing the tilting apparatus, adjust the angle of the antenna, and fasten the bolts, which takes much more time to tilt the antenna.

Please replace the paragraph spanning pages 8-11 of page 3 as follows:

When the power divider 51 divides the radio signal into two parts in the ratio of 1 to 2, the intensity of one part fed into the second phase shift 53 is two times stronger than that of the other part fed into the first phase shift units 52. That is, one part of the power divider 51 has a degree

of zero and an amplitude of 1. The other part of the power divider 52 has a zero degree and an amplitude of 2.

Please replace the paragraph spanning lines 18-21 of page 3 as follows:

When the first and second phase shift units 52 and 53 are rotated by certain degrees, the phase difference between input and output signals at the OP3, OP5, OP6 and OP4 are 3 $\Theta/2$, $\Theta/2$, $-\Theta/2$ and - 3 $\Theta/2$ respectively. That is, the OP3 has a degree of +3 $\Theta/2$ and an amplitude of 0.5. The OP5 has a degree of + $\Theta/2$ and an amplitude of 1. The OP6 has a degree of - $\Theta/2$ and an amplitude of 1. The OP4 has a degree of -3 $\Theta/2$ and an amplitude of 0.5. In this case, the phases of the adjacent output signals differ by Θ.

Please replace the paragraph spanning lines 1-13 of page 4 as follows:

~~Be that as it may~~ However, the main drawback to the conventional phase shifter is that there is a need for an additional power divider capable of acquiring an output signal that has the same phase as the input signal. In addition, as the phase shift units are turned by certain degrees to vary the phase of the input signal, the radio signal fed into a metallic contact between a fixed part and a variant part is likely to go through an intermodulation. In this case, attainable variation in the angle of antenna beam tilt in vertical directions is limited largely due to a one-dimensional way the delay units delay the radio signal. Here, the delaying of the radio signal is done by making use of the distance between the radio signals.

Page 4, line 15, please replace the heading "Disclosure of the Invention" as follows:

Summary of the Invention

Please replace the paragraph beginning on page 4, line 23 and ending on page 5, line 11 as follows:

In accordance with an aspect of the present invention, there is provided a phase shifter, including: an input port for receiving a radio frequency (RF) signal; a power dividing means for dividing the RF signal into a first divided signal of which phase is to be varied and a second divided signal having a fixed phase value; a first output port for outputting the second divided signal having the fixed phase value; a phase shift unit for dividing the first divided signal into a third divided signal and a fourth divided signal wherein the third divided signal and the fourth divided signal move in opposite directions and for shifting phase of the third divided signal and the fourth divided signal based on a difference in a path length of the third divided signal and the fourth divided signal, to thereby generate phase-shifted signals; a phase delay means ~~for shifting phase of the third divided signal and the fourth divided signal based on a difference in a path length of the third divided signal and the fourth divided signal, to thereby generate phase-shifted signals~~ for delaying of the third divided signal and the fourth divided signal based on the phase-shifted signals; and at least two second output ports connected to ~~said~~ the phase delay means, for outputting the phase-shifted signals.

Page 6, line 25, please replace the heading "Modes(s) for Carrying Out the Invention" as follows:

Mode(s) Best for Carrying Out the Invention

Please replace the paragraph spanning lines 6-13 of page 7 as follows:

As shown, a phase shifter 200 is electrically connected to five antenna array elements numbered ~~from~~ 210, 220, 230, 240 and ~~to~~ 250. A first array element 1 (210) has a degree of $\Theta 1$ and an amplitude of P1. A second array element 2 (220) has a degree of $\Theta 2$ and an amplitude of P2. A fourth array element 4 (240) has a degree of $\Theta 4$ and an amplitude of P4. A fifth array element 5 (250) has a degree of $\Theta 5$ and an amplitude of P5. A handle 260 controls the phase shifter 200 in such a way that the phase difference between radio frequency (RF) signals fed into the array elements has a scale factor of Θ. In detail, the phase difference between two adjacent RF signals fed into the array elements is Θ. Typically, the handle 260 incorporates a remote-controlled step motor.

Please replace the paragraph spanning lines 7-10 of page 8 as follows:

The dielectric 20 transports an electric power by electromagnetic bond. The dielectric 20 is evaporated on the upper side of the circuit board 30. ~~Teflon can be used as the dielectric 20.~~

Please replace the paragraph spanning lines 23-26 of page 8 as follows:

FIG. 4 is a schematic diagram illustrating a phase shifter in accordance with the present invention. The same reference numeral is given to the same element, although the element appears in different drawings, and may not be described in further detail.

Please replace the paragraph spanning lines 11-23 of page 9 as follows:

The function of the semicircular copper plate mounted on the bottom side of the phase shift unit 15 is to transfer an electric power from an input port 10 to the phase delay unit 17A or

17B. On the bottom side of the phase shift unit 15 is mounted the semicircular copper plate facing another semicircular copper plate mounted on the circuit board 30. The dielectric 20 is located between the two semicircular copper plates. The phase delay unit 17A or 17B includes a micro strip line and ~~an~~ open stubs ~~stub~~. The capacitance between the stubs and the circuit board ground plane causes the RF signal to be propagated slowly. Input impedance of the phase delay unit 17A or 17B is adjusted by the length of ~~the~~ an open stub. The open stub is connected to one part of the input port 10, and the length and width of the open stub is adjusted so that the input port 10 has the impedance of 50Ω.

Please replace the paragraph beginning on page 9, line 26 and ending on page 10, line 9 as follows:

As ~~a~~ an RF signal is fed into the input port 10, a power divider divides the RF signal into two parts. One part is a signal of which phase is variable. The other part is a signal having a fixed phase value. The power divider includes a first induction unit 13, a second induction unit 14 and a dielectric 20. The first induction unit 13 is a copper plate shaped like a semicircle and is mounted on the circuit board 30. The first induction unit 13 transmits a first divided signal to a first output port. The second induction unit 14 is a ring-shaped copper plate and is mounted on ~~the underside~~ a side of the phase shift unit 15. The second induction unit 14 transmits the other divided signals to the phase delay unit 17a or 17b. The dielectric 20 is positioned between the first and second induction units 13 and 14.

Please replace the paragraph spanning lines 16-26 of page 10 as follows:

The power divider ~~decides~~ determines on how the electric power is shared between two different portions of the RF input signal. In which case, one portion has a fixed phase value and the phase of the other portion is to be shifted. Here, the power divider controls power energy of the first divided signal and the second divided signal by varying the length of the semicircular arc of the first induction unit 13 and the size of the second induction unit 14. Another embodiment of the present invention implements a phase shifter in which an input port 10 branches off to carry the portion of a RF input signal having a fixed phase value.

Please replace the paragraph spanning lines 6-11 of page 12 as follows:

The phase delay units 17A and 17B are shaped like an arc-shaped comb. An output signal from each output port of the phase delay units 17A and 17B has a different phase value. This is ~~owing~~ due to the fact that the radius of the arc formed by the phase delay unit 17A differs from that of the phase delay unit 17B.